

MEMORANDUM

TO: Larry Christley, Program Manager, Solid Waste Management
Tennessee Department of Environment and Conservation

FROM: Susan Bush, Leidos

DATE: May 22, 2014

RE: Summary Notes – Public Input Meetings, May 5-8, 2014
2015-2025 Tennessee Solid Waste and Materials Management Plan

Four Public Input meetings were held May 5–8, 2014, in locations in West, Middle, East and Southeast Tennessee. In addition, one online meeting was held to encourage participation by those unable to attend one of the other meetings.

Attendees were asked to provide input regarding their attitudes and preferences for certain policy options, strategies, and programs. During a facilitated input exercise, attendees were asked to indicate their preference, lack of support or neutrality using green, red, and tan dots. For participants in the online meeting, a survey was created to obtain input on the same options, strategies and programs.

The presentation used in the Public Input meetings is available online at:

http://www.tn.gov/environment/solid-waste/docs/plan-2025/public-input-meeting-presentation_may-2014.pdf

Archived footage of the online meeting can be viewed at:

<http://nowuseeit.state.tn.us/mediasite5/SilverlightPlayer/Default.aspx?peid=bb015c3ba1054d08ad8ed2de142a094a1d> and the survey at: <https://www.surveymonkey.com/s/2025plan>.

Understanding the Charts in this Summary

- Findings are presented overall (total numbers) first, with meeting-specific results following.
- Note that it is possible for one “option” to be both highly supported, as well as opposed, if the attendees had strongly divergent opinions.
- In the charts that follow, support is indicated with a check mark (✓) and non-support with an X. For some options, a certain degree of approval or disapproval was indicated but at a much less significant level. These instances are indicated with a smaller check mark (✓) or x.

I. Solid Waste and Materials Management Goals

1. Recycling Versus Diversion Goal

- More than half of the attendees prefer that the state sets both a statewide diversion goal and a statewide recycling goal.
- This was the most preferred option at all meeting locations.
- Fewer than 10 percent of the attendees prefer that the state set only a recycling goal.

2. Scope of Goal

- Slightly more than half of the attendees prefer that local governments have a recycling goal that applies to the municipal solid waste they control.
- This was the preferred option in Knoxville and Chattanooga, while Nashville and Jackson audiences had a slight preference for the local goal to pertain to all of the municipal solid waste generated.

3. Energy Recovery and Goals

- More than half of the attendees indicated their preference to see energy recovery count toward diversion.
- This was the most preferred option at all meeting locations except Nashville where equal numbers of participants preferred to see recovery count toward diversion as preferred energy recovery contribute to diversion only if it is demonstrated as the highest and best use available.
- The least preferred option overall was that energy recovery count toward disposal, with about four percent of attendees preferring this option.

Summary: On a meeting location basis, the goal preferences were as follows:

Goal	Knoxville	Chattanooga	Nashville	Jackson
Should the state establish a recycling goal, a diversion goal, or both a diversion and recycling goal:	Both diversion and recycling	Both diversion and recycling	Both diversion and recycling	Both diversion and recycling
Local governments/counties should have a specified recycling goal based on:	MSW under their control	MSW under their control	All MSW	All MSW
Energy recovery should count as:	Diversion, not disposal	Diversion, not disposal	<i>Tied:</i> - Diversion, not disposal; - Diversion/only if it is the highest and best use available	Diversion, not disposal

II. Specific Policies

The **most highly supported** policy options presented (supported by 78 to 95 percent of total attendees providing a response) include:

- Require solid waste haulers to register and report data on annual reports.
- Certify and promote recycling processors that meet certain requirements and require them to report tons received from each county.
- Require cities to report recycling activities on annual progress reports.
- Expand and promote state contracts, allowing local governments to purchase recycled content products using those contracts.

Moderately supported policy options presented (supported by 52 to 66 percent of total attendees providing a response) include:

- Require that the state and its vendors purchase certain products with a specified recycled content.
- Place a pre-disposal fee on selected recyclable products when they are sold with proceeds dedicated to building recovery infrastructure.
- Require generating businesses to report recycling activities on annual reports.

The policy options presented that had the **most opposition**, i.e., *expressions of non-support*, (more than 20 percent of total attendees providing a response) include:

- Ban specific recyclable and organic materials from disposal once adequate collection and processing infrastructure are in place.
- Require the state and its vendors to purchase certain products with specified recycled content.
- Require public or private entities applying for a permit to expand or develop a new disposal facility to demonstrate that existing disposal capacity is not sufficient to handle projected needs.

By meeting location, the five most preferred and three least preferred (i.e., most highly opposed) options included:

Option		Knoxville		Chattanooga		Nashville		Jackson	
		Most	Least	Most	Least	Most*	Least**	Most	Least
A	Ban specific organics from disposal after infrastructure in place.		X		X				
B	Require counties to have certified recycling coordinator, state provides training.						X		X
C	Require cities to report recycling.	✓		✓		✓		✓	
D	Pre-disposal fee on selected recyclable products.		X			✓			
E	Expand state contracts and	✓		✓			X	✓	

Option		Knoxville		Chattanooga		Nashville		Jackson	
		Most	Least	Most	Least	Most*	Least**	Most	Least
	allow local governments to use to purchase recycled content products.								
F	Require state and vendors to purchase certain products with specified recycled content.	✓			X	✓	x		X
G	Certify and promote recycling processors that meet certain requirements and require them to report tons received from each county.	✓		✓		✓	x	✓	
H	Require businesses to report recycling activities.			✓				✓	
I	Require those applying for permit to expand or develop disposal facility to prove need for additional capacity.		X		X	✓			X
J	Require haulers to register and report.	✓		✓		✓		✓	

Table Notes:

- In Nashville, two options “tied” for fifth most preferred, so there are six most preferred options indicated.
- In Nashville, none of the options opposed received 20 percent “disapproval” (or even greater than 10 percent disapproval). The four “least preferred” options in Nashville – all of which received the same rating – are therefore indicated with a smaller x.

III. Material-Specific Issues

Food Waste and Other Organics

1. The strategies to increase diversion of food waste and other organics receiving the highest level of support (74 to 82 percentage of total attendees providing a response) include:

- Recruit or invest in pilot facilities that use innovative technology to produce soil amendment or compost from organics.
- Evaluate and remove regulatory barriers to use soil amendment, compost and energy produced from diverted food waste and other organics.
- Recruit or invest in pilot facilities that recover energy from wood waste and/or other organics.
- Provide financial and/or technical support for on-site projects to divert organics at locations such as schools, colleges and universities, prisons, hospitals, and food processing industries.

2. Strategies to increase diversion of food waste and other organics with a modest level of support (58 to 67 percentage of attendees providing a response) include:

- Expand list of products made from recovered organics included in state contracts and promote use of contracts by local governments.
- Implement rules that streamline siting and permitting of centralized processing facilities for recovered organics.

3. Strategies to increase diversion of food waste and other organics with the most opposition, i.e., expressions of non-support, (more than 20 percent of attendees providing a response) include:

- When sufficient infrastructure is documented in a region, ban organic materials from disposal by large-scale generators.

By meeting location, the three most preferred and two least preferred (i.e., most highly opposed) options include:

Option		Knoxville		Chattanooga		Nashville		Jackson	
		Most	Least	Most	Least	Most	Least	Most	Least
A	Implement rules that streamline siting and permitting of processing facilities for organics.			✓					X
B	Recruit or invest in pilot facilities that use innovative technology to produce soil amendment or compost from organics.	✓							
C	Recruit or invest in pilot facilities that recover energy from wood waste/other organics.	✓	X	✓		✓		✓	
D	Establish programs for state government and its vendors to lead by example in the use of soil amendment/compost.	✓							
E	Expand list of products made from recovered organics included in state contracts and promote use of contracts by local governments.	✓			X	✓			
F	Evaluate and remove regulatory barriers to use soil amendment, compost, and energy produced from diverted organics.	✓	X				X		

Option		Knoxville		Chattanooga		Nashville		Jackson	
		Most	Least	Most	Least	Most	Least	Most	Least
G	Provide financial and/or technical support for on-site projects to divert organics at locations such as schools, colleges and universities, hospitals and prisons, etc.	✓		✓		✓		✓	
H	When sufficient infrastructure is documented in a region, ban organic materials from disposal by large-scale generators.		X		X		X	✓	X

Table Notes:

- In situations where there were “ties” for most and least preferred, additional options were included.
- Similarly, if the portion of attendees selecting an option for least or most preferred was less significant, the “x” or “✓” is smaller.

Electronics

- The strategies to increase recycling of electronics with the highest level of support (supported by more than 80 percent of attendees providing a response) include:**
 - Certify electronics recyclers to ensure electronics are being recycled in a reasonable fashion.
- The strategies to increase recycling of electronics with a moderate level of support (supported by 70 to 80 percent of attendees providing a response) include:**
 - Require electronics manufacturers to provide convenient collection for recycling their products to household consumers in state.
 - Require electronics manufacturers to provide convenient collection for recycling their products sold to public schools in state.
 - Ban the disposal of specified electronic products in landfills once well-established collection infrastructure is in place.
- The strategy receiving the most opposition, i.e., *expressions of non-support*, (not supported by 16 percent of attendees providing a response) include:**
 - Have the state obtain a contract for electronics recycling and make it available to local governments.

By meeting location, the three most preferred and two least preferred (i.e., most highly opposed) options include:

Option		Knoxville		Chattanooga		Nashville		Jackson	
		Most	Least	Most	Least	Most	Least	Most	Least
A	Require electronics manufacturers to provide convenient collection for recycling their products to household consumers.	✓			X	✓			X
B	Require electronics manufacturers to provide convenient collection for recycling their products to their products sold to public schools.	✓			X			✓	
C	Require electronics manufacturers to offer collection programs for recycling electronics at no additional cost to the consumer.		X		X		X	✓	
D	Ban the disposal of specified electronic products in landfills once well-established collection and infrastructure is in place.		X	✓		✓	X	✓	X
E	Certify electronics recyclers to ensure electronics are being recycled in a responsible fashion.					✓			
F	Have the state obtain a contract for electronics recycling and make it available to local governments.	✓		✓					X

Notes:

- In Chattanooga, there were two options that were clearly more strongly supported, and the remaining four options all received the same level of support, so there are only two options included as "most preferred."
- In Chattanooga, two options received the same degree of support as the second-most supported option, so both are listed.
- In Jackson the options that had the second- and third-highest degree of opposition had the same level of non-support, but significantly less than the least preferred option, so they are all shown with a smaller "x" indicating those opposed to a lesser degree.

Construction and Demolition Debris

1. The strategy receiving the highest level of support (supported by at least 70 percent of attendees providing a response) include:
 - Develop model ordinance(s), incentives, and other policies that local governments can adopt to increase diversion of C&D by builders.
 - Develop and maintain a materials exchange for C&D materials and a directory of recycling businesses to encourage/facilitate the recycling of these materials.
 - Provide grants/technical assistance to support the development of C&D recycling facilities.
2. The strategies receiving a moderate level of support (supported by 50 to 70 percent of attendees providing a response) include:
 - Require state-sponsored construction, demolition, or renovation projects to meet specific recycling goals.
3. The strategies receiving the most opposition, i.e., expressions of non-support, (opposed by more than 20 percent of attendees providing a response) include:
 - Require state-sponsored construction, demolition, or renovation projects to meet specific recycling goals.
 - Incentivize the development of C&D recycling facilities by banning disposal of certain materials by a specified timeframe.

By meeting location, the three most preferred and one least preferred (i.e., most highly opposed) options include:

Option		Knoxville		Chattanooga		Nashville		Jackson	
		Most	Least	Most	Least	Most	Least	Most	Least
A	Ban disposal of certain materials by a specified timeframe to incentivize the development of C&D recycling facilities.		X		X		X		X
B	Require state-sponsored construction, demolition or renovation projects to meet specific recycling goals.		X		X		X		X
C	Develop model ordinance(s), incentives and other policies that local governments can adopt to increase diversion of C&D by builders.	✓		✓		✓		✓	

Option		Knoxville		Chattanooga		Nashville		Jackson	
		Most	Least	Most	Least	Most	Least	Most	Least
D	Develop and maintain a materials exchange for C&D materials and a directory of recycling businesses to encourage/facilitate the recycling of these materials.	✓		✓		✓		✓	
E	Provide grants/technical assistance to support the development of C&D recycling activities.	✓		✓		✓		✓	

IV. Funding and Prioritizing Resources

Funding Options

1. There was no clearly favored funding strategy indicated by attendees providing a response:

Two funding options were supported by more than 55 percent of attendees providing a response:

- Place a surcharge on waste disposed at Class III/IV landfills with funds dedicated to support state and local solid waste and materials management programs.
- Increase surcharge at MSW disposal facilities with funds dedicated to support state and local solid waste and materials management programs.

The other two funding options were supported by 48 to 51 percent of attendees who provided a response:

- Place a pre-disposal fee on the sale of electronics and dedicate funds to local governments for solid waste and materials management.
- Place a pre-disposal fee on the sale of appliances and dedicate funds to local governments for solid waste and materials management.

2. All of the strategies presented had an opposition rate of greater than 20 percent.

3. Examining these responses on a meeting location basis indicates the following two most preferred and one least approved (i.e., most highly opposed):

Option		Knoxville		Chattanooga		Nashville		Jackson	
		Most	Least	Most	Least	Most	Least	Most	Least
A	Increase surcharge (from current \$0.90 per ton) at MSW disposal facilities.	✓			X	✓	X	✓	X
B	Place a surcharge on waste disposed at Class III/IV landfills.	✓							

Option		Knoxville		Chattanooga		Nashville		Jackson	
		Most	Least	Most	Least	Most	Least	Most	Least
C	Place a pre-disposal fee on the sale of electronics.			✓		✓			X
D	Place a pre-disposal fee on the sale of appliances.		X	✓			X	✓	

Table Notes:

- In Jackson and Nashville, the two most strongly opposed options received equal levels of opposition; therefore, the two least preferred strategies are indicated.

Allocation of Resources for Education, Outreach, Training and Technical Assistance

1. Of the strategies presented for education, outreach, training and technical assistance, the three choices receiving the most overall support include:

- Implement a statewide recycling campaign aimed at citizens, focusing on the economic benefit of recycling, including educational materials that local governments can tailor to their programs.
- Develop and maintain a directory and interactive map of collectors, processors, and end users of recovered materials for use by local governments and businesses.
- Prepare and publish best practices for local government officials and staff on topics such as public-private partnerships, emerging technologies, pay-as-you-throw and other financial incentives, and cost-effective collection for rural communities.

2. The option that received the least support overall was:

- Create and conduct a training program for local government recycling coordinators and either require or incentivize a local government to have at least one staff person certified.

Examining these responses on a meeting location basis indicates the following top two preferred and least supported options:

Option		Knoxville		Chattanooga		Nashville		Jackson	
		Most	Least	Most	Least	Most	Least	Most	Least
A	Implement a statewide recycling campaign aimed at citizens, focusing on economic benefit of recycling, including materials that local governments can use to tailor to their program.	✓		✓		✓		✓	
B	Prepare and publish best practices for local government officials and staff							✓	

C	Create and conduct training program for local government recycling coordinators and require or incentivize local governments to have at least one staff person certified.		X		X				X
D	Expand technical assistance to help generating businesses recycle, including conducting waste audits, designing collection programs, identifying markets for collected material, etc.			✓			X		
E	Develop and maintain a directory and interactive map of collectors, processors and end users of recovered materials.	✓				✓		✓	

Table Notes:

- In Jackson there was a tie for the second-most supported options; therefore, three top choices were included.

Allocation of Resources for Developing Recycling Infrastructure

1. Of eight options presented (of which attendees were asked to select their top five), the five most-supported options for developing recycling infrastructure include:

- Fund regional recycling hubs where recovered material is aggregated and shipped to processors. Focus on regions where collection and direct delivery to markets is cost prohibitive.
- Invest in recycling collection containers for schools, hospitals, etc.
- Invest in tire processing capacity for scrap tires collected by local governments to make processed tires available to existing end users.
- Expand statewide access to collection of recyclables by funding convenience centers where curbside collection is not feasible.
- Invest in local/regional collection and processing equipment for food waste, wood waste, and other organics.

2. The least-supported options include:

- Invest in joint collection of recyclables from small businesses that can't cost-effectively participate on their own.
- Recruit and develop processing/end use capacity for glass.
- Develop permanent HHW collection capacity that is readily accessible to residents in every county/region in state.

Examining these responses on a meeting location indicates the following top four preferred and two least supported:

Option		Knoxville		Chattanooga		Nashville		Jackson	
		Most	Least	Most	Least	Most	Least	Most	Least
A	Fund regional recycling hubs where recovered material is aggregated and shipped to processors, focusing on regions where collection and direct delivery to markets is cost-prohibitive.	✓		✓		✓			
B	Expand statewide access to collection of recyclables by funding convenience centers where curbside collection is not feasible.			✓			X	✓	
C	Recruit and/or develop processing/end use capacity for glass collected in TN.	✓				✓			X
D	Invest in local/regional collection and processing equipment for food waste, wood waste, and other organics.	✓			X	✓		✓	
E	Invest in tire processing capacity for scrap tires collected by local governments.		X	✓		✓			
F	Develop permanent HHW collection capacity that is readily accessible to residents of every county/region in state.	✓			X				
G	Invest in recycling collection containers for schools, hospitals, industries, etc.	✓		✓				✓	
H	Invest in joint collection of recyclables from small businesses that cannot cost-effectively participate on their own.		X				X		

Table Notes:

- In Knoxville, due to the same level of support for some options, the top five are indicated.

- *In Knoxville, one option had only slightly less support than most of the other options, therefore it is indicated with a small x.*
- *In Jackson, several options received the same intermediary level of support. These options were therefore not included as either most or least supported. For this reason, Jackson's results show only three "most preferred" and one "least preferred" response.*

Summary of Public Comments from Public Input Meetings

Knoxville – May 5, 2014

- I am not against the bill, per se, but what concerns me is that historically in the state of Tennessee, "goals" have become mandates. I disagree with the way we're trying to go about reaching this goal. The focus is on the collection, the front end. Local governments need to be focusing on the private sector, funding options for them. They are the ones that need and want the material. Let's take some of the burden off county and state governments, as well as local governments, to look at the other end of it. We should be creating incentives, and if the incentives are there financially, it will happen, and we will almost inadvertently meet the goal.
- I think that if you're using taxpayer money for waste, regardless if you are using \$3,000 or \$30,000, you have an obligation to report that on the annual report. Why can that not go toward tires? That's what I would like to see. Instead, we are collecting money from our citizens, then it drops off and comes all the way back around to the counties to deal with the problem. Every tire, they conveniently put the responsible party for the tire printed right on the side of it. If you are going to sell tires in the state of Tennessee, for every tire you sell you need to recycle one. They (tire brand owners) send full trucks and they leave empty. You can fill it right back up and they can take them right back where they came from. They will use it to make new tires. It would be the company's responsibility to deal with something that they created.
- Some of these (options presented) seem to me like they are a double-barrel questions – I either put a green dot requiring solid waste haulers, public and private, to register and report data – to me I can see, we still do the annual reporting but requiring them to register and another question would be requiring them to report.
- Incentivizing development of disposal facilities by banning disposal of certain materials – I like the incentives but not the bans. There could be grants to give an incentive that doesn't require a ban. There are benefits to conducting training programs for local government recycling coordinators, but I'm not sure they should be mandatory.
- Implement rules that streamline sighting facilities for recovering organics. I think the rules are the problem, if you are someone who wants to collect food waste from 30 restaurants for farmland – you should make an exception for that rule.
- "Remove regulatory barriers" – needs to be on starting a program, creating a program.
- A "Goal" – recycling needs to be voluntary. If you are going to punish us, then call it a mandate. If you can give us money – from the state's perspective – it gives incentives to deal with some of these hard-to-recycle materials, like glass.

- Are you considering the clean air and clean water act in your plan? I am very concerned in about the processes. If you are going to burn plastic it will contaminate the air.
- All landfills should be lined – consider that the current landfill liners are only guaranteed for 40 years. The stuff that is in the landfills is not totally decomposed after 40 years.
- There is a lot of misinformation in our school about recycling. We cannot understand why recycling programs are not in place. A teacher said “we do recycle.” But there is no program.
- Remember this plan is 12-15 years down the road, not what your problems are now. Not the next school budget. I won’t be here at my job in 11, 12, 15 years. We have had two county workers retire because they were dying. We want to pass the torch to a new generation.
- Processers need a permit – now companies get paid to post their losses from the BP oil spill.
- Incentives – a lot of states give incentives for tire end use. Tennessee should consider that.
- If there is a state price for equipment that is available without bidding, that could help local governments purchase equipment at a lower price.

Chattanooga – May 6, 2014

- Could you tell us a little bit about how current curbside recycling activity is measured?
- Is there anything to show the percentage of recycling at home? Or in a specific apartment complex?
- Answered by an attendee: Justin Holland – We don’t handle multi-family units as residential collection so they are held for our curb-side recycling collection. The convenient centers are available for multi-family units. We have five convenient centers throughout the city that are available for businesses, multi-family units and single family units. It is a challenge to get those multi-family units who contract waste collection to recycle. It costs money to recycle and encourage people to do the right thing. A lot of times, if there is no incentive for them to recycle or it isn’t regulated, it is very difficult to encourage participation. Until there is regulation, it will be a challenge for both private industry and the public sector.
- You had mentioned that private businesses should be required to be part of the process of reporting the amount of materials that go through their facility. I am concerned that this information could be used by my competitors.
- Is scrap metal counted in the diversion rate?
- Response – Basically anything that the regionals report to us could be counted as diversion. Anything that can be considered to be a traditional recycled material, like metals, paper and plastic. General traditional recycled materials do count towards the waste reduction on the annual diversion report. We do have several industries that report. We have different categories such as pre-consumer recycling, post-consumer recycling, etc. We are generally trying to get at the post-consumer recycling (MSW).
- Some of these policies for increased recycling, particularly when we are talking about organics and composting, are of interest. Are policies being considered for composting? On site as well as larger scale facilities? Are those businesses going to have a pickup service vs. composting on site? Does one have more incentives attached? What about biogas vs. aerobic?

- Response – All options and technologies are being considered as viable possibilities at this point in time.

Nashville – May 7, 2014

- It seems that solid waste is more controversial than people realize, because Hillary Clinton had a shoe thrown at her the other day at some meeting and she said, “Good gracious, I didn’t know solid waste was so controversial.” She may have been living under a rock because it’s sure been controversial here. We have had so much radioactive waste coming in from other states and countries. In Rutherford County we had the BSFR- Bulk Survey for Release waste. It was being disposed at five landfills in Tennessee. We petitioned the Co-Founder of End-it with Kathleen Farris. They were bringing in nuclear waste and dumping it in Tennessee. The other four landfills are getting more because we are not getting it anymore. I have lived in Rutherford County for 50 years; I live on a farm and am very dependent on two wells. The ground water is very precious to me. I have been appalled at what has happened in Tennessee and this country during these last 50 years because of what happened at TVA and Montgomery Valley, the coal ash going in and ruining everything and they still have not finished cleaning it up. The thing in West Virginia and the dam river in North Carolina, to see destruction to precious water ways. The Stones River to our landfill in Rutherford County. My main concern is the environmental and health-related issues as they relate to solid waste. Primary to the welfare of the people, more important than the economy of the state, is the preservation of clean water. In the past, poor management of solid waste has polluted rivers, streams and ground water in Tennessee and water is of course necessary to all on earth. We should guard it as our greatest treasure. In the future, better regulations, penalties and enforcement of law are needed to safeguard our supplies of clean water. No more landfills should be permitted on rivers that supply drinking water to thousands of people. No more corporate dumping of toxins that poison the ground water. No more dumping of radioactive waste or hazards waste such as coal ash in landfills that were intended for garbage. Two such landfills sit on an aquifer that provides water to the city of Memphis. Is anybody here from Memphis? When those landfills leak, sooner or later it will happen, what will become of the city of Memphis? Dangerous materials can no longer be placed in community landfills. Transparency is needed so the communities are informed regarding the waste stream that is entering their local communities. I see that you have included in some of these options informing the communities. Appalling things keep happening and we have been pleading for the landfills to be restructured in such a way as to help our Stones River not be fed contaminated water from the leaks in the landfills. Waste needs to go elsewhere, not into the Stones River. Thank you.
- One issue that I’m concerned about when we talk about recycling, is I’m involved in anti-nuclear work with people from elsewhere in the state and also all over the country. One of the things that has come to our attention is that there is a move on how to recycle radioactive material metals from public consumption. If this happens, it will be a threat to people’s health and lives. I read about a cooking lid, in Canada, that was being imported and was rejected because it was so radioactive. So, when we talk about recycling metals I think that it’s something that has to be

taken into account that this could happen. There is already a request for a permit in Memphis where they take these huge steam generators from nuclear reactants to be able to recycle some of that metal and I think that the state needs to keep very close watch over what is happening. Much of it is done by private corporations and the federal government. My other concern is with the recycling of organic material. I'm an organic gardener, I read up on composting and I know that leaves, grass clippings, vegetable waste and coffee grounds make wonderful compost to enrich the soil and grow healthy vegetables but there are many things that should not be used on food crops. For example, cedar, black walnut wood chips are toxic to many plants. There are substances such as dairy products that will spoil compost for use in the garden and I know it would be difficult to separate that out. I am told by Mr. Liddell that it is being done in some places and I think that if it can be done, if those things could be separated out, this could be a very lucrative process for local government or state government because gardeners like me are always looking for compost and it is not easy to produce enough on your own for a large garden. I think it would be a good source of income if the details of it can be worked out. I appreciate the amount of input the public is being allowed on this process and the fact that you are getting it before hand and not after the fact.

- I am Bruce Wood, the elected president of BURNT, a 26-year-old environmental group here in Nashville. The last time I was in this room Rachel Sumner was very active in pesticides was getting booted out of a new group, they never even met and she got kicked out. So, I guess it's kind of a BURNT tattoo on if she irritated people so much that they wouldn't let her in. Then Mark Twain said "everything that's been said, everything that needs to be said has been said but not everybody's had a chance to say it." Moving right along, when I heard the presentation today, what just jumped out at me was two words: environmental injustice – it wasn't there. Who gets hurt by these landfills? The poor people, the minority people and rural people. They are not all the same, like in Camden that's a very middle class city that is shrinking now due to major landfills and TDEC Nashville feeds one of them and the other one Nashville feeds in Murfreesboro and there was extensive testimony. What I would like to say before my five minutes are up is the whole plan, the fundamental flaw with this whole plan is that it should focus on two things; recycling, which would include tires and plastic and compost, food waste, yard waste. Just focus on that and leave everything else alone because you get garbage up with all that other stuff. There are so many people adding things but it's never going to pass and I don't understand, what's the question about financing these facilities? You've got garbage, you've got food waste – it's worthless. If you enhance the value of it why can't you pass the bond and pay for these facilities? There is no need for "oh, we need \$25 million from the state legislature to pay for these facilities." Oh that's a good plan, a good plan, go back to Georgia. We'll never get \$25 million from the state legislature for anything but a new baseball park somewhere or a revitalization of UT Knoxville football, so let's grow up and concentrate on recycling and composting, composting and recycling. And then the landfills, the landfills it's just corrupt. Let's just use the "c" word in terms of Tennessee, its corrupt. There is a law-68-211-803 – which mandates that the state have a plan to protect citizens and the environment from solid waste facilities and that's been a law since 1991. Actually, it's been a law since 1969 and

yet, magically, no landfill has ever hurt the environment or its citizens. And oh Murfreesboro, I would like to search, where's the pollution in Murfreesboro that's hurting people? It hasn't hurt people because the State of Tennessee says so. Dickson County, where people have died. No, no, no, they didn't really die because the state of Tennessee says they didn't die. Why are we doing this, why now? Everybody is very nice, everybody's very polite and everyone is getting their \$337,000 but I am just saying, right now it looks like an academic exercise because – where is BFI? I've been to two of these hearings, where is BFI? When are they showing up? And showing their case in public? Their little private meetings to state their case. We pay for the value of these, not for money but for the enhanced value of the material. It's all just disgusting, what we are doing here is hurting our state. Again I've said it probably five or six times so one more time won't hurt. Composting and recycling, and recycling prove tires and plastics. Other than that it's just terrible. It's just terrible, terrible, it would be better if we weren't doing this plan because this plan and this will be my last point, I've seen this plan in Georgia by really the same company and they have action goals. Action goals! Reduce landfilling and construction waste and had three pages of steps, and if you have three pages of steps, you might as well have no steps.

- I have an organization for safety for children in schools. The group is called Parents for Students. I want to say that I am very much for recycling and for teaching the kids in schools that we can do better. The food waste is monumental in schools, for example. They just place everything in one bin, paper plates, forks, food. Schools could have quick, some kind of quick composting means or something to start a trend in every school. My worry is though, that we are trying to do recycling collection of hazardous waste in schools – old batteries, paint, things like that. I don't think it's a safe thing to have to have a collection site for those materials around children. I think that should be considered – that schools do not store those materials around children. I have seen our state for example put in a cheap landfill, fill it up and use the site to put a school on. I don't know how that is being addressed in Tennessee. I would like to know if there is any information that would show that a school has been built on a landfill site. I am also concerned about the safety of these recycled and reused products. For example, I saw that in some playgrounds they use tire shreds. I am very much for recycling, but when I was at the playground with my son, I noticed that when the sun hits those tire shreds it smells very much like something toxic. Also, when children are of his height they breathe the material in. It's not safe. I wanted to make sure things like that are evaluated for the safety of our children because we cannot just assume everything that we recycle is safe. We need to focus on the safety, especially for future generations, of not only what is already in the ground and water but also what is in the air. Because it affects them even more than it affects grown-ups.

Jackson – May 8, 2014

- Sustainability and efforts toward going green and the increase in recycling, the focus there that we are seeing out in communities and are becoming infused in our culture are certainly very important as we make wise management decisions related to our natural resources in particular. This morning I want to think about the dependence that we have on the soil and

water and the challenges we consider as we manage waste disposal. When we think about the number of entities that are involved in disposal where residual waste is, you can see that there is a lot of input in food processing. As we think about food and beverage industries we find seeping from can liners, we see them creating unsanitary liquid spills, and they develop unsightly stains. As you are out and about in the communities these liquid spills attract insects and other types of vermin and they produce offensive odors. Further, thinking about liquids in the solid waste disposal, they contribute to the disposal weight and therefore increased disposal costs. I am asking that consideration be given to the solid-liquid separation particularly in venues where there are high volumes of liquid wastes that are incorporated in solid waste disposal. When that happens recycling will become more manageable. Liquid wastes can be properly treated then reintroduced safely back into our environment. This would promote sustainability, our culture of sanitation, and lead to an enhanced sustainability of our soil and water.

- Who is the survey targeting?
- Response – There are two surveys, one targeting businesses/commercial entities and one for city representatives.
- As I look at the issue of allocating limited resources, how are those arrived at? They seem to focus primarily on rural and less accessible locations? You need to look at the 80/20 and where are you getting 80 percent of your material. Strategies don't seem to be presented for the more populated communities.
- Response – We are seeking input where certain choices might need to be made, or where nuances are complex. The issues/options presented are not the only strategies being considered.
- In some of your surveys, are you specifically targeting some of the more rural municipalities that may not be using or participating in the recycling or assisting in the county programs? Are you getting information from them about what they would like to see as far as assistance or grants, maybe even technical assistance, to see what they would like to have to be more involved in recycling? It is very important component to draw the municipalities in. Usually the counties are coordinating waste management in the regions. So if we include the cities you will see their rates increase too.
- Response – We are surveying cities.
- What is diversion – if you are not in a Class I and you are diverting it to Class III – but you're not recycling, what is diversion? – The reason I am asking is because we are trying to come up with uses for tires and we put them back in the ground. Even though we use the materials, it's still disposal.
- Response – This is one of the differences between recycling and diversion. If a material has a beneficial use, even if it is in a landfill (e.g., alternative daily cover), then it is diverted from disposal (and is taking the place of an alternative material that might otherwise have to be purchased), but because it is still being placed in a landfill, it is diversion, not recycling. California makes this distinction, for example.